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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,336	01/06/2006	Kazuhiro Ono	P27943	3742
7055	7590	11/01/2006	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			ROBERTS, LEZAH	
			ART UNIT	PAPER NUMBER

1614

DATE MAILED: 11/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/535,336	<b>Applicant(s)</b> ONO ET AL.	
	<b>Examiner</b> Lezah W. Roberts	<b>Art Unit</b> 1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____                                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>29 Mar 2006</u>   | 6) <input type="checkbox"/> Other: ____                           |

## DETAILED ACTION

### Claims

#### Claim Rejections - 35 USC § 112/ 35 USC § 101 – Use Claims

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 13 provides for the use of a one or more substance for dissolving dental calculus and/or dental caries, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 13 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

**Claim Rejections - 35 USC § 102 - Anticipation**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1) Claims 1, 4-5, 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Dhabhar et al. (US 4,130,638).

Dhabhar et al. disclose mouthwashes with effective anti-plaque and calculus activity for treating periodontal disease. The compositions comprise citric acid and sodium chloride (see Example), encompassing the instant claims. The reference anticipates the instant claims insofar as it discloses a method and agent for dissolving dental calculus and/or dental caries comprising citric acid and sodium chloride.

2) Claims 1-2, 8 and 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakashima et al. (US 4,335,102).

Nakashima et al. disclose oral compositions comprising phytic acid and its salts to treat dental caries, encompassing claims 1-2 and 10-13. The compositions comprise surface-active agents (col. 6, lines 57-58), encompassing claim 8. The compositions may also comprise pH adjusters such as citric acid, tartaric acid, malic acid and

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phosphoric acid (col. 7, lines 41-45). The reference anticipates the instant claims insofar as it discloses a method and agent for dissolving dental calculus and/or dental caries comprising phytic acid and a surface-active agent.

3) Claims 1, 4-5 and 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Rudy et al. (US 4,606,912).

Rudy et al. disclose compositions for remineralizing dental caries. The compositions comprise edetic acid and tartaric acid. The compositions also comprise sodium chloride and may comprise citric acid (see Example 1). The reference anticipates the instant claims insofar as it discloses a method and agent for dissolving dental caries comprising edetic acid or tartaric acid, citric acid and sodium chloride.

4) Claims 1, 6-8 and 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakashima et al. (US 4,645,662).

Nakashima et al. disclose compositions for treating hypersensitivity, which is a disease, caused by conditions of the teeth such as dental caries. The compositions comprise carboxylate compounds such as glycolic acid (col. 4, line 3). Also included is phosphoric acid. The compositions may comprise enzymes such as lysozymes and proteases (col. 8, lines 54-56). The compositions also comprise surface actives (col. 7, lines 3-5), encompassing claim 8. The reference anticipates the instant claims insofar as it discloses a method and agent for dissolving dental caries comprising glycolic acid, phosphoric acid, enzymes and a surface-active agent.

5) Claims 1-2 and 8-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Garlich et al. (US 5,300,289).

Garlich et al. disclose oral compositions comprising phytic acid and anti-bacterial compound. The compositions are used to control calculus and dental plaque. The anti-bacterial compounds include cetyl trimethylammonium bromide (cetrimide) (col. 7, lines 30-31). The reference anticipates the instant claims insofar as it discloses a method and agent for dissolving dental caries comprising phytic acid and a surface-active agent.

6) Claims 1, 3 and 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Tagashira et al. (JP409295944).

Tagashira et al. disclose compositions comprising a polyphenol from hop bract. The compositions act as an anti-cariogenic composition. It prevents adhesion of glucan and microorganisms of decayed tooth to the surface of a tooth. The compositions also comprise surfactant (see Abstract), encompassing claim 8. The reference anticipates the instant claims insofar as it discloses a method and agent for dissolving dental caries comprising polyphenol from hop bract.

Claims 1-13 are rejected.

No claims are allowed.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lezah W. Roberts whose telephone number is 571-272-1071. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin H. Marschel can be reached on 571-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Lezah Roberts  
Patent Examiner  
Art Unit 1614



Frederick Krass  
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